

**DIVERSIFIED BOND FUND REVIEW**

**JOINT PENSION BOARD PRINCIPLES**

	<b>CHOICE</b>	<b>FAIRNESS</b>	<b>LIQUIDITY</b>	<b>WELL-INFORMED DECISIONS</b>	<b>RESPONSIVE TO MEMBER PREFERENCES</b>	<b>PRUDENCE</b>	<b>COST EFFECTIVE ADMINISTRATION</b>
Commercial mortgages	<p>Adding commercial mortgages doesn't increase or reduce the choice available to members since the assets will come from existing managers of the Diversified Bond Fund. Members will continue to be offered a broad and diversified choice of both investment and retirement vehicles.</p> <p>Although commercial mortgages is an investment option with a low level of liquidity , adding it should not reduce members' choice of liquid options as only a portion of the Diversified Bond Fund will be invested in Commercial Mortgages and overall the fund will retain the same liquidity level.</p>	<p>Given that commercial mortgages offer less than monthly liquidity, existing members of the Diversified Bond Fund could potentially own a disproportionate share of the illiquid assets if a large number of members decide to redeem their units from the fund. In that case the principle of Fairness would not be upheld.</p>	<p>Commercial mortgages are not fully liquid and would typically not be able to accommodate either monthly contributions or redemptions.</p> <p>An initial allocation and a full redemption would typically take 6 to 12 months to complete.</p>	<p>It is important to clearly explain the working of any new product added to the Diversified Bond Fund and the potential risks that they bring. Compared to existing holdings in the Diversified Bond Fund, the level of complexity of commercial mortgages would be considered low.</p>	<p>There have been various levels of interest expressed by members regarding the proposed investment strategies in this table. In addition, all members should prefer to receive enhanced returns if they don't come with increased risk and they look to the Joint Pension Board to seek out investment portfolios that will allow them to achieve that goal.</p> <p>There haven't been widespread requests for commercial mortgages.</p>	<p>Commercial mortgages have been around for a long time but have been mainly used by insurance companies. Institutional investors such as endowments and foundations and pension plans have been slow to adopt, although there has been trend towards adding them to a portfolio. The penetration level for DC plans is low, mostly for liquidity reasons. The volatility of commercial mortgages is similar to that of the DEX Universe Bond Index, sometimes lower, depending on the manager.</p>	<p>Commercial mortgage mandates are more expensive than traditional actively managed fixed income funds. Investment management fees would range from 0.50% to 1.00%.</p>
Real return bonds	<p>Adding real return bonds doesn't increase</p>	<p>Given that real return bonds can</p>	<p>No issues with liquidity as real return bonds are</p>	<p>Compared to existing holdings in the</p>	<p>The Joint Pension Board has received some</p>	<p>Real return bonds are long-term in nature and</p>	<p>Investment management fees for</p>

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	<p>or reduce the choice available to members since the assets will come from existing managers of the Diversified Bond Fund. Members will continue to be offered a broad and diversified choice of both investment and retirement vehicles.</p>	<p>accommodate at least monthly contributions and redemptions, then there are no issues with unfairness with any plan members. All retirement plan members will be exposed to the same fees, transition costs, contribution and withdrawal rules and regulations.</p>	<p>fairly liquid and most mandates available would provide daily liquidity.</p>	<p>Diversified Bond Fund, the level of complexity of real return bonds would be considered moderate.</p>	<p>requests regarding adding real return bonds to the Western plans.</p>	<p>are issued by the Government of Canada. As such, there's little credit risk but significant interest rate risk involved.</p> <p>In addition, yields on real return bonds are extremely low (0.47% as of January 5, 2012) and returned more than 18% in 2012, which may suggest that they're richly valued.</p>	<p>an actively managed mandate of real return bonds would be around 0.35%, similar to those of an ETF. A passive real return bond fund mandate would cost around 0.05%, given that the assets could be combined with other fixed income assets managed by SSgA.</p>

**JOINT PENSION BOARD STATEMENT OF INVESTMENT BELIEFS**

Statement	Comments															
1. Good governance policies improve investment returns	No impact on the decision.															
2. Diversification is an investment risk management mechanism; it should provide protection on the downside and the long-term	<p>Commercial mortgages and real return bonds tend to have a lower correlation with traditional fixed income securities. The 10-yr correlation coefficients between the DEX Universe Bond Index and the two commercial mortgage managers recently hired by the University’s Operating &amp; Endowment Fund have been 0.11 for Romspen Mortgage Investment Fund and 0.81 for Greystone Mortgage Fund.</p> <p>The projected correlation between Canadian real return bonds is 0.51 with the DEX Universe Bond Index and 0.60 with the DEX Long-Term Bond Index (Source: J.P. Morgan Asset Management).</p>															
3. Asset classes have specific risk/return characteristics	<p>Commercial mortgage managers have demonstrated an ability to outperform the DEX Universe Bond Index with similar or lower volatility over the years.</p> <table border="1" data-bbox="628 727 2494 911"> <thead> <tr> <th colspan="3" data-bbox="1327 732 1795 760">Performance as of December 31, 2010</th> </tr> <tr> <th data-bbox="628 764 1247 797"></th> <th data-bbox="1255 764 1873 797">4-Yr Return</th> <th data-bbox="1878 764 2494 797">4-Yr Standard Deviation</th> </tr> </thead> <tbody> <tr> <td data-bbox="628 802 1247 834">Greystone Mortgage Fund</td> <td data-bbox="1255 802 1873 834">6.65%</td> <td data-bbox="1878 802 2494 834">3.26%</td> </tr> <tr> <td data-bbox="628 839 1247 872">Romspen Mortgage Investment Fund</td> <td data-bbox="1255 839 1873 872">9.44%</td> <td data-bbox="1878 839 2494 872">0.23%</td> </tr> <tr> <td data-bbox="628 876 1247 909">DEX Universe Bond Index</td> <td data-bbox="1255 876 1873 909">5.55%</td> <td data-bbox="1878 876 2494 909">3.53%</td> </tr> </tbody> </table>	Performance as of December 31, 2010				4-Yr Return	4-Yr Standard Deviation	Greystone Mortgage Fund	6.65%	3.26%	Romspen Mortgage Investment Fund	9.44%	0.23%	DEX Universe Bond Index	5.55%	3.53%
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DEX Universe Bond Index	5.55%	3.53%														
4. Alternative investments should be considered on a case by case basis and should meet the following three conditions: <ul style="list-style-type: none"> <li>a. They’re fully liquid</li> <li>b. They have a consistent valuation method</li> <li>c. They’re fully transparent</li> </ul>	<p>Commercial mortgages can be considered a hybrid investment between real estate and fixed income. Both commercial mortgage managers hired by the University’s Operating &amp; Endowment Fund have a consistent valuation methodology and are fully transparent. However, they don’t have the same liquidity levels as our existing fixed income managers.</p> <p>An investment with Greystone would take approximately 6 to 12 months to be funded. Redemptions would also take place over a few months, depending on the size of the redemption and the number of investments redeeming.</p> <p>Romspen would allow monthly investments and redemptions, although redemptions would be subject to availability of assets.</p> <p>An allocation to commercial mortgage would have to be managed separately to our normal monthly cash flow process.</p>															
5. Portfolio rebalancing	No impact on the decision.															

Statement	Comments
between asset classes allows members to maintain the risk of the portfolio and is the member's responsibility (except for the Balanced Growth & Balanced Income funds)	
6. Active management may add value in some markets but passive management is the Pension Board's default choice	Real return bonds can be passively managed. One of our existing fixed income managers, SSgA, offers a passively managed real return bond fund. Commercial mortgages have to be actively managed.
7. Liquidity is extremely important for a Defined contribution plan	For commercial mortgages, see Joint Pension Board Principles and belief #4. Real return bonds are fully liquid.
8. It is very difficult to repeatedly time the market through ongoing changes to the equity/bond mix	No impact on the decision.
9. Investment costs must be monitored	See Joint Pension Board Principles.
10. Foreign currency hedging is desirable to reduce risk	The proposed real return bond and mortgage funds invest in Canadian securities only.

**Annualized Returns (net of fees) as of November 30, 2011**

	<b>1-Yr</b>	<b>2-Yr</b>	<b>3-Yr</b>	<b>4-Yr</b>	<b>5-Yr</b>	<b>10-Yr</b>
Diversified Bond Fund	6.92%	7.33%	10.05%	6.44%	5.77%	5.76%
Benchmark	6.76%	5.81%	7.05%	6.23%	5.59%	5.67%
DEX Universe Bond Index	8.04%	6.53%	7.68%	6.77%	5.85%	6.28%
Value Added (benchmark)	0.16%	1.52%	3.00%	0.21%	0.18%	0.09%
Value Added (DEX Universe)	-1.12%	0.80%	2.37%	-0.33%	-0.08%	-0.52%
UBC Bond Fund	8.05%	N/A	10.16%	N/A	6.18%	6.10%

**Annualized Volatility as of November 30, 2011**

	<b>1-Yr</b>	<b>2-Yr</b>	<b>3-Yr</b>	<b>4-Yr</b>	<b>5-Yr</b>	<b>10-Yr</b>
Diversified Bond Fund	2.58%	2.72%	3.39%	4.42%	4.09%	3.86%
Benchmark	2.59%	3.01%	3.07%	3.24%	3.13%	3.43%
DEX Universe Bond Index	2.96%	3.45%	3.45%	3.56%	3.45%	3.47%
Difference (benchmark)	-0.01%	-0.28%	0.32%	1.18%	0.96%	0.43%
Difference (DEX Universe)	-0.38%	-0.72%	-0.06%	0.86%	0.63%	0.39%









